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Gentobiase.

Hexophosphatase.

Hydrogenase.

Hydroxynitrilase.

Invertase.

Laccase.

Linamarase.

Lipase.

Methylglyoxalase.

Nucleotidase.

Pepsin.

Peptase.

Peptidase.

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*p*-nitro-, melting point of (PUSHIN), ii, 277.

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*nitro*-, action of light on (SCHULTZ and GANGULY), i, 647.

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*Toluene compounds, Me = 1.*

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***o*-Tolueneazoacetylacetone, and its derivatives, and 3-nitro-** (BÜLOW and SPENGLER), i, 1102.

***p*-Tolueneazoallylformaldoxime** (WALKER), i, 1193.

***p*-Tolueneazobenzylformaldoxime, and its phenylcarbamate** (WALKER), i, 1193.

**4-*p*-Tolueneazo-3:5-dimethylisoxazole, and 4-*m*-nitro-** (BÜLOW and SPENGLER), i, 1102.

**4-*p*-Tolueneazo-3:5-dimethylpyrazole, and its salts, and 4-*m*-nitro-** (BÜLOW and SPENGLER), i, 1102.

**Toluene 3-azo-oximinoacetotoluidides** (KARRER, DIECHMANN, and HAEBLER), i, 243.

**4-*p*-Tolueneazo-1-phenyl-3:5-dimethylpyrazole, and 4-*m*-nitro-** (BÜLOW and SPENGLER), i, 1102.

**1-*p*-Tolueneazoxy-2-aminonaphthalene** (CHAERIER, CRIPPA, TOIA, and BIANCHESI), i, 591.

***p*-Toluenesulphenanilide** (LECHER, HOLZSCHNEIDER, KÖBERLE, SPEER, and STÖCKLIN), i, 390.

***p*-Toluenesulphonbenzylamide** (HOLMES and INGOLD), i, 1143.

***p*-Toluenesulphonbenzylmethylamide, and its hydrochloride** (HOLMES and INGOLD), i, 1143.

***o*'-Toluenesulphonamidobenzaldoximes, and the corresponding acetates** (V. AUWERS), i, 1461.

***o*-2-Toluenesulphonamidobenzonitrile** (V. AUWERS), i, 1460.

**1-*p*-Toluenesulphonamidonaphthalene-8-sulphonic acid, and its sodium salt** (FINZI), i, 654.

**Toluene-*o*-sulphonic acid, electrochemical oxidation of** (FICHTER and STOCKER), i, 239.

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**Toluene-*p*-sulphonic acid, esters, alkyl-ation by** (FINZI), i, 648.

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**Toluenesulphonic acids, dinitro-, sodium salts** (BRADY, HEWETSON, and KLEIN), i, 16.

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***p*-Toluenesulphonyl chloride, action of on nitrophenols** (SANE and JOSHI) i, 134.

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***p*-Toluenesulphonylhydrazine, and its derivatives** (FREUDENBERG and BLÜM-MEL), i, 52.

***o*-Toluenesulphonylindazoles** (V. AUWERS), i, 1461.

**Toluene-*p*-sulpho-*p*-phenetidide, nitro-derivatives, and their derivatives** (REVERDIN), i, 1409.

***p*-Toluenethiolsulphonic acid, *o*-nitro-phenyl ester** (MILLER and SMILES), i, 392.

***m*-Tolueic acid, 6-thiol-** (KROLLPFEIFFER, SCHULTZE, SCHLUMBOHM, and SOMMERMEYER), i, 1306; (ARNDT), i, 1311.

***p*-Tolueic acid, 2-amino- and 2-nitro-, diethylaminoethyl esters, and their hydrochlorides** (SODERMAN and JOHNSON), i, 814.

**$\omega$ -trichloro-, synthesis of** (BÖESEKEN and GELISSEN), i, 30.

**Tolueic acids, hydroxylamine salts** (OESPER and BALLARD), i, 1233.

**Tolueic acids, amino-, separation of** (MAYER and SCHULZE), i, 1315.

***o*-Toluidine, 3:5-dibromo-, additive compounds of, with metallic salts** (HANN and SPENCER), i, 653.

**5-iodo-, preparation of, and its salts and derivatives** (HANN and BERLINER), i, 908.

***m*-Toluidine, bromo-4:6-dihydroxy-, hydrobromide, and its derivatives** (HENRICH and GöTZ), i, 913.

***p*-Toluidine, surface tension of aqueous solutions of** (EDWARDS), ii, 387.

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***p*-Toluidino-*p*-anisidino-1:4-naphtha-quinone** (FRIES and BILLIG), i, 940.

**$\beta$ -Toluidinobenzylmalonic acids, esters of** (WAYNE and COHEN), i, 550.

**3-Toluidino-5-ketoisoxazoles** (WORRALL), i, 308.

**3-Toluidino-5-ketopyrazoles** (WORRALL), i, 308.

**1-Toluidinomethylbenzthiazoles, and their derivatives** (HUNTER), i, 1336.

**2-*p*-Toluidino-1:4-naphthaquinone, 3-chloro-2-*N*-nitroso-** (FRIES and BILLIG), i, 939.

**1-*p*-Toluidino- $\beta$ -naphthol-4-sulphonic acid** (LANTZ and WAHL), i, 910.

**Toluidino-oximinopinacolin** (RHEINBOLDT and SCHMITZ-DUMONT), i, 1132.

*Toluene compounds, Me = 1.*

**Toluidino-5-phenyl-1:3:4-thiodiazines**, and their hydrobromides and derivatives (BOSE), i, 1465.

**m-Toluidino-m-toluthiazole**, and its derivatives (LEV), i, 445.

**5-Toluidino-4-o-tolyl-1:2:4-triazole**, 3-thiol, derivatives of (FROMM and SZERDÖ), i, 985.

**p-Toluidino-3:4:5-trimethoxyphenylcarbinol**, and its hydrochloride (SONN and MEYER), i, 932.

**p-Toluiminoisothio-p-toluamide**, and its hydrochloride (ISHIKAWA), i, 1149.

**p-Toluoyl chloride**, 2-nitro- (SODERMAN and JOHNSON), i, 814.

**Toluoylacetamides**, hydroxy- (ANSCHUTZ, ASCHENBERG, KUCKERTZ, KRONE, RIEPENKRÖGER, and ZERBE), i, 667.

**o-Toluoylbenzoic acid**, methyl ester (WEISS and KOREZYN), i, 560.

**o-Toluoylbenzoic acids** (BRAND, LUDWIG, and BERLIN), i, 904.

**m-Toluoylbenzoic acid**, o-4-bromo- (HELLER and MÜLLER-BARDORFF), i, 546.

**m-Toluoyl-3:4:5.6-tetrachloro-2-benzoic acid**, 2'-hydroxy- (ORNDORFF and PATEL), i, 672.

**8-Toluoyl- $\alpha$ -naphthoic acid** (MASON), i, 33.

**$\beta$ -Toluoyloxyproponic acids**, and their amides (POWELL and JOHNSON), i, 278.

**$\gamma$ -m- and  $\beta$ -Toluoyloxypropyl alcohols** (POWELL and JOHNSON), i, 278.

**2-o-Toluoylphenyldi-o-tolylcarbinol** (WEISS and KOREZYN), i, 560.

**Toluquinone**, action of azides with (CHATTAWAY and PARKES), i, 985.

**Toluyleneamidine-2-phenyl- $\alpha$ -carboxylic acid**. See 4-Methylbenziminazole-2-benzoic acid.

**m-Tolyl hydroxyethyl ether** (CASSELLA & Co.), i, 397.

**p-Tolyl p-acetoxybenzyl ether** (PUMMERER, PUTTFARCKEN, and SCHOPFLOCHER), i, 1263.

**isoamyl sulphide** (GILMAN, BEABER, and MYERS), i, 1057.

**benzyl ether** (v. BRAUN and REICH), i, 1405.

**$\beta$ -chloroethyl sulphide** (LECHER, HOLSCHEIDER, KÖBERLE, SPEER, and STÖCKLIN), i, 390.

**cinnamyl ether** (CLAISEN, KREMERS, ROTH, and TIETZE), i, 656.

**methyl ether**, 2-amino-, and 5-bromo-2-amino-, 2-acetyl derivatives (GRIFFITH and HOPE), i, 827.

**$\alpha$ - and  $p$ -Tolyl acetates**, action of sodium on (HALL), i, 23.

**p-Tolylacetaldehyde p-nitrophenylhydrazone** (STEPHEN), i, 1131.

*Toluene compounds, Me = 1.*

**$\alpha$ -Tolylacetic acid**,  $\omega$ -amino- and its derivatives (v. BRAUN and REICH), i, 1407.

**p-Tolylisoamylsulphone** (GILMAN, BEABER, and MYERS), i, 1057.

**$\alpha$ -Tolyl anisyl ketone** (DE DIESBACH and STREBEL), i, 1435.

**$\alpha$ -Tolylarsinic acid** (BURTON and GIBSON), i, 84.

**Tolyl-5-arsinic acids**, diamino-, and nitroamino-, benzoyl derivatives (HAMILTON and MAJOR), i, 990.

**N-p-Tolylbenzimidodo-p-tolylether** (CHAPMAN), i, 1401.

**$\alpha$ -Tolylbenzylketimine**, and its hydrochloride (JASPERS), i, 936.

**p-Tolylborneol** (LEDUC), i, 821.

**p-Tolylcamphene** (LEDUC), i, 821.

**$\alpha$ - and  $p$ -Tolylcarbamic acids**, dinitro-esters of (KNIPHORST), i, 906.

**$\alpha$ -Tolylcarbamide**, 5-iodo-, and its hydrochloride (HANN and BERLINER), i, 908.

**m-Tolylcarbamide**, 2:4- and 4:6-dinitro- (GIUA and PETRONIO), i, 1397.

**$\alpha$ - and  $p$ -Tolylcarbamides**, dinitro- (KNIPHORST), i, 906.

**$\alpha$ -Tolylcarbylamine**, 5-iodo- (HANN and BERLINER), i, 908.

**p-Tolylecitrinellylamine**, and its derivatives (RUPE and RINDERKNECHT), i, 658.

**m-Tolylcyanamide**, 4:6-dinitro- (GIUA and PETRONIO), i, 1397.

**1-Tolyl-3:5-diketopyrazolidines**, tolylhydrazine derivatives of (VAN ALPHEN), i, 83.

**p-Tolyldimethylaminomethyl-p-tolylmethane**, and its hydrochloride (SOMMELET), i, 803.

**p-Tolyl diphenyllyl- $\alpha$ -naphthylmethyl chloride** and methyl ether (DILTHEY), i, 653.

**p-Tolyl diphenyllyl ketone**, and its oxime (DILTHEY), i, 653.

**$\beta$ -Tolylethylamines**,  $\omega$ -chloro-, salts and derivatives of (v. BRAUN and REICH), i, 1406.

**$\alpha$ -Tolyl- $\beta$ -ethylcarbamide** (KNIPHORST), i, 906.

**$\alpha$ -Tolylethylketimine**, and its hydrochloride (JASPERS), i, 936.

**$\alpha$ -Tolyl- $\beta$ -ethylnitrocarbamides**, dinitro- (KNIPHORST), i, 906.

**p-Tolylidenemalonic acid**, and its ethyl ester (CHRZASZCZEWSKA), i, 956.

**p-Tolylidenementhone**, and its hydrochloride (SAMDAHL), i, 415.

**5-Tolylimino-4-acetyl-2-methylthiol-4:5-dihydrothiodiazole** (GUHA and RÄV), i, 703.

*Toluene compounds, Me = 1.*

**1-Tolylimino- $\beta$ -naphthaquinone** (SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES), i, 413.

**5-Tolylimino-2-thion-2:3:4:5-tetrahydro-1:3:4-thiodiazole**, and its derivatives (GUHA and RAY), i, 703.

**o-Tolylcycloiminotoluquinone** (CHATTAWAY and PARKES), i, 985.

**2-p-Tolylindazole**, 3-cyano-, and its oxide (HELLER and SPIELMEYER), i, 838.

**1-Tolyllindazoles**, 4-nitro- (v. AUWERS and FRESE), i, 1102.

**2-p-Tolylindazole-3-carboxylic acid** (HELLER and SPIELMEYER), i, 838.

**p-Tolylmercuric hydrogen carbonate and mercaptan** (KOTEN and ADAMS), i, 236.

**p-Tolylmercuri-2:4:6-trinitrophenyl** (KOTEN and ADAMS), i, 237.

**o-Tolylmethylketimine**, and its hydrochloride (JASPER), i, 936.

**a-p-Tolyl- $\beta\beta$ -methylnitrocarbamide**, 2:6-dinitro- (KNIPHORST), i, 907.

**3-m'-Tolyl-5-methylpyrazole**, 3:2'-hydroxy- (WITTIG), i, 279.

**4-p-Tolylmorpholine** (CRETCHER and PITTINGER), i, 228.

**Tolynaphthalimide**, o-amino- (CHAKRAVARTI), i, 162.

**2-Tolyl- $\alpha\beta$ -naphthatriazoles**, and their oxides, and 4-hydroxy- (CHARRIER, CRIPPA, TOIA, and BIANCHESI), i, 591.

**1-p-Tolyl-1in-naphthatriazole-4:9-quinone** (FRIES and BILLIG), i, 940.

**m-Tolyl- $\alpha$ - and  $\beta$ -naphthylamines**, di-nitro- (BRADY, HEWETSON, and KLEIN), i, 16.

**s-o-Tolyl- $\alpha$ -naphthylcarbamide**, 5-iodo- (HANN and BERLINER), i, 908.

**a-m-Tolyl- $\beta$ -nitrocarbamide**,  $\alpha$ -4:6-di-nitro- (GUHA and PETRONIO), i, 1397.

**a-m-Tolyloxy- $\alpha\beta$ -dibenzoylethane** (CONANT and LUTZ), i, 682.

**a-Tolyloxy- $\alpha\beta$ -dibenzoylethylenes** (CONANT and LUTZ), i, 682.

**2-p-Tolyloxy-2:3-dihydro-p-benzoquinonemethane**, and its derivatives (PUMMERER, PUTTFARCKEN, and SCHOFLOCHER), i, 1262.

**p-Tolyloxy-P-oxodihydrobenzodiazaphospholium** (AUTENRIETH and BÖLLI), i, 1469.

**p-Tolyloxy-P-oxotetrahydrodiazaphospholium** (AUTENRIETH and BÖLLI), i, 1469.

**p-Tolyloxy-p-thiodihydrobenzodiazaphospholium** (AUTENRIETH and MEYER), i, 990.

**p-Tolyloxythiophosphoryl dichloride** (AUTENRIETH and MEYER), i, 807.

**o-Tolylphenylketimine**, and its derivatives (JASPER), i, 936.

*Toluene compounds, Me = 1.*

**$\gamma$ -o- and  $\beta$ -Tolylpropinones** (BERT, DORIER, and LAMY), i, 1373.

**$\beta$ -m-Tolylpropionic acid**,  $\alpha$  cyano- (BAKER and LAPWORTH), i, 30.

**1-p-Tolyl-2-pyrrolidone**, and its picrate (LIPP and CASPERS), i, 963.

**3-Tolylrhodanylidene- $\Delta^{6:3}$ -oxindoles** (HANN), i, 987.

**p-Tolylselenoglycollic acid**, and its salts (MORGAN and PORRITT), i, 1197.

**p-Tolylselenoxyglycollic acid** (MORGAN and PORRITT), i, 1197.

**4-p-Tolylsemicarbazide**, and its derivatives (WHEELER and BOST), i, 317.

**p-Tolylsuccinic acid** (CHRASZCZEWSKA), i, 956.

**p-Tolylsulphonyl- $\beta$ -phenylpropionic acid** (ARNDT), i, 1310.

**$\beta$ -p-Tolylsulphonylpropionic acid** (ARNDT), i, 1310.

**$\beta$ -p-Tolylsulphoxypropionic acid** (ARNDT), i, 1310.

**Tolyl-2-thio-4-ketothiazolidines**, condensation of, with substituted vanillins (HANN), i, 1105.

**$\beta$ -p-Tolylthiol-n-butyric acid** (KROLL-PFEIFFER, SCHULTZE, SCHLUMBOHM, and SOMMERMEYER), i, 1305.

**a-p-Tolylthioldiphenylacetic acid** (BISZTYCKI and RISI), i, 1426.

**2-p-Tolylthiophen** (CHRASZCZEWSKA), i, 956.

**o-Tolyl p-tolyl ketone** (DE DIESBACH and STREBEL), i, 1435.

**4-o-Tolyl-1-o-tolylthiocarbamidophenylthiosemicarbazide** (GUHA and RAY), i, 1462.

**Tomato plants**, nutrition and growth of (KRAYBILL and SMITH), i, 1122. effect of sodium nitrate on growth of (WORK), i, 1366.

**Torulin** (KINNERSLEY and PETERS), i, 1516.

**Tourmaline** in Dartmoor granite (BRAMMALL and HARWOOD), ii, 819.

**Toxicological analysis**. See Analysis.

**Toxicology**, chemical (KOHN-ABREST), i, 1116.

**Toxins** (KARRER, WEBER, and VAN SLOOTEN), i, 1226. conversion of, into anatoxins (BERTHELOT and RAMON), i, 481.

**Train oil**, separation of unsaturated fatty acids in (TOYAMA and TSUCHIYA), i, 1129.

**Transfer resistance** (FERGUSON and VAN ZYL), ii, 547.

**Transport numbers**, apparatus for determination of (MACINNES and BRIGHTON; SMITH and MACINNES), ii, 542.

**Trees**, descent of nitrogenous substances in leaves of, in autumn fading (COMBES), i, 1023.

deciduous, constituents of leaves of (FRICKE), i, 764.

**Trehalose** in yeast (E. M. and F. C. KOCH), i, 1508.

*iso***Trehalose**, and its octamethyl ether (SCHLUBACH and MAURER), i, 888.

**Triacetonamine**, nitroso-, catalysis of decomposition of, by hydroxyl ions (BRÖNSTED and KING), ii, 1171.

$\omega$ -**2:4-Triacetoxycetophenone** (NIERENSTEIN, WANG, and WARR), i, 34.

**2:4:6-Triacetoxylbenzaldehyde** (PRATT and ROBINSON), i, 826.

**Triacetoxylhydroxychlorodititanium chloride** (GIUA and MONATH), i, 581.

**Triallylacetophenone** (HALLER, BAUER, and RAMART), i, 261.

**Triallylsulphonium iodide**, compound of iodoform with (STEINKOPF and BESSARITSCH), i, 496.

$\beta$ -**Triamyllose nitrates** (PRINGSHEIM, LEIBOWITZ, and SILMANN), i, 1244.

**Trianhydrostrophanthidin** (JACOBS and COLLINS), i, 566.

**Trianhydratetrakisdiphenylgermanediol** (MORGAN and DREW), i, 1197.

**4:4':4"-Trianilinotri-*m*-tolylcarbinol** (GOMBERG and ANDERSON), i, 1065.

**4:4':4"-Trianilinotri-*m*-tolylmethane** (GOMBERG and ANDERSON), i, 1065.

**Triaquiotriamminecobaltictriaquotrisulphato cobaltate**. See under Cobalt.

**Triarsenatomanganic acid** (DEISS), ii, 893.

**Triarylcarkinols**, *o*-hydroxy-, tautomerism of (GOMBERG and MCGILL), i, 1269.

**Triazine derivatives**, thermal properties of binary mixtures of (PASCAL), ii, 953.

**Triazines**, preparation of (SOCIETY OF CHEMICAL INDUSTRY IN BASLE), i, 441.

**Triazinetricarboxylic acid**, complex iron derivatives of (PASCAL), i, 984.

**1:2:3-Triazole**, 4:5-*dicyno*-, and its derivatives (GRISCHKEVITSCH-TROCHIMOVSKI; GRISCHKEVITSCH-TROCHIMOVSKI and KOTKO), i, 1104.

**1:2:3-Triazolecarboxylic acid**, *cyano*-, and its ethyl ester (GRISCHKEVITSCH-TROCHIMOVSKI; GRISCHKEVITSCH-TROCHIMOVSKI and KOTKO), i, 1104.

**Triazoledicarboxylic acid**, *N*-hydroxy-, and its potassium hydrogen salt (WIELAND), i, 1050.

**1:2:3-Triazole-4:5-dicarboxylic acid**, monoamide of (GRISCHKEVITSCH-TROCHIMOVSKI), i, 1104.

**3:4:5-Tribenzoyloxybenzaldehyde** (SONN and MEYER), i, 932.

**3:4:5-Tribenzoyloxybenzanilide** (SONN and MEYER), i, 932.

**Tribenzylammonium iodide**, compound of iodoform with (STEINKOPF and BESSARITSCH), i, 495.

**triiodide** (STEINKOPF and BESSARITSCH), i, 497.

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